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Dated: 3/6/06

Signature: 

(Diane Blevins)

Docket No.: 532212000623
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Thomas L. CANTOR

Application No.: 10/617,489

Confirmation No.: 4476

Filed: July 10, 2003

Art Unit: 1641

For: METHODS, KITS AND ANTIBODIES FOR
DETECTING PARATHYROID HORMONE

Examiner: J. Cheu

**DECLARATION OF THOMAS L. CANTOR
PURSUANT TO 37 C.F.R § 1.132**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

I, Thomas L. Cantor, in my individual capacity, hereby declare as follows:

1. I am the inventor of the above-referenced patent application, and am familiar with the contents thereof.

2. This application is a continuation-in-part (CIP) of serial number 09/344,639, filed on June 26, 1999, and now issued as U.S. Patent No. 6,743,590, which is a CIP of serial number 09/231,422 (the '422 application), filed on January 14, 1999, now issued as U.S. Patent No. 6,689,566 (the '566 patent).

3. Figure 5 of the '422 application mentions a tracer antibody that is referred to as "PTH 1-8 Antibody as Tracer." The term "PTH 1-8 antibody" was used to refer to this antibody

because I then believed the antibody had been isolated by Dr. Ping Gao and his co-workers using a PTH 1-8 peptide for affinity purification of the antibody. When Figure 5 was created and when the '422 application was filed, I believed that such a tracer antibody was used for the experiment represented by Figure 5.

4. In a deposition which occurred on August 27, 2003, related to the case Nichols v. Scantibodies on Nichols's U.S. patent No. 6,030,790, the attorney questioning me said, "Well, isn't it true that 1-9 meant that you used a 1-9 peptide to affinity purify your antibody?" In response, I stated: "I believe Dr. Gao used a peptide that contained 1-9."

5. In connection with the case Scantibodies v. Immunotopics on Scantibodies' 566 patent, I became aware that the peptide in question was purchased from a supplier, as was the normal practice at Scantibodies: such peptides are typically purchased, rather than made. I also saw the invoice for the particular peptide used for affinity purification of the antibody that was used to generate the data represented by Figure 5 of the patent application serial number 09/231,422, which was filed on January 14, 1999. The invoice states that the peptide purchased for that purpose was a peptide containing PTH 1-9.

6. Based on the above facts, I believe that the antibody used to generate the results described in Figure 5 of serial number 09/231,422 should have been referred to as a PTH 1-9 antibody. In the current application, Figure 5, which was retained from the earlier '422 application, still refers to the antibody as "PTH 1-8 Antibody." Accordingly, I believe Figure 5 of the current application should be corrected to refer to the antibody as "PTH 1-9 Antibody."

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States

Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

March 6, 2006

Date



Thomas L. Cantor



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form and the use of
"es-sion-ist" \-pre-

2: ROMANCE 5
de-emphasizes tra-
by more pragmatic
-b(-)ra-li-zam/n
ic) (1882): a Neo-

relating to the latest
toms implements 2

ne- + log- + -isme
2: a meaningless
-jis-tik/adj (1896)

-thyü-adj (1896)
y contraction) —
zha-ni-zam/n

ectrum highly toxic
by a streptomycetes
eat local infections

1 NEW (1898) 1: a
it is found in minute
ELEMENT table 2

proportion of neon
ination provided by

eon 2: extremely

to, or affecting the
st month after birth

natus, pp. of nasci to
ild; esp.: a child less

branch of medicine
s of newborn infants

nber of a group es-
is — neo-Nazi adj

of or relating to a
acterized by a reac-
s scripturally based

-señ
enthusiasm for what

r. Gk neophytos, fr.
+ phyein to bring
SELYTE 2: NOVICE 1

: the formation of

ew growth of tissue

1: of, relating to, or
elating to neoplasti-

, fr. ne- + plastique
-ti-cist/-sist/n

1: Platonism mod-
n, post-Aristotelian,
rld as an emanation

ie soul is capable of
e similar to ancient
lä-adj — Neo-pla-

(1937): a synthetic
ne, characterized by
pecial-purpose cloth-

: a movement esp. in
ect depiction of low-
o-re-al-is-tic \-rē-

Puerto Rican living
Yorker and puert-
o lives on the U.S.

erto Rico
(ca. 1909): a move-
medieval Scholasti-

ts
ine (as in physostig-
form of its bromide
22N₂O₅ esp. in the
n the diagnosis and

Gk teinein to stretch
larval or immature
maturity during the

3k neōterikos, fr. Gk,
ng — more at NEW]

-ic \-pik/adj [ISV]
ographic region that
eau of Mexico
ical region
hat is selected subse-
preexisting type that

so Ne-pal-is [Hindi
al] (ca. 1885) 1: a

native or inhabitant of Nepal 2: an Indo-Aryan language spoken in
Nepal — Nepali adj

ne-pen-the \nə-ˈpenti-thē/ n [L nepenthes, fr. Gk nepēthes, neut. of
nepenthēs banishing pain and sorrow, fr. nē- not + penthos grief, sor-

row; akin to Gk pathos suffering — more at NO PATHOS] (1580) 1: a
potion used by the ancients to induce forgetfulness of pain or sorrow

2: something capable of causing oblivion of grief or suffering — ne-
pen-the-an \-thē-an/adj

neph-e-line \nə-ˈfē-lēn/ also neph-e-lite \-līt/ n [F néphéline, fr. Gk
nephelē cloud — more at NEBULA] (ca. 1814): a hexagonal mineral that
is a usu. glassy crystalline silicate of sodium, potassium, and aluminum

common in igneous rocks — neph-e-line-ic \nə-ˈfē-lē-nīk/adj
neph-e-line-ite \nə-ˈfē-lē-nīt/ n [ISV] (ca. 1863): a silica-deficient igne-

ous rock having nepheline as the predominant mineral — neph-e-line-
itic \nə-ˈfē-lē-nī-tik/adj

neph-e-lome-ter \nə-ˈfē-lō-mə-tər/ n [Gk nephelē cloud + ISV
-meter] (1884) 1: an instrument for measuring the extent or degree of
cloudiness 2: an instrument for determining the concentration or

particle size of suspensions by means of transmitted or reflected light
— neph-e-lome-ter-ic \nə-ˈfē-lō-mə-trīk/adj — neph-e-lome-ter-i-cal
-ly \-trī-k(ə)-lē-əd/adj

nephew \nə-ˈfju:/, chiefly Brit. \-ˈvju:/ n [ME newew, fr. OF neuveu, fr. L
nepot-, nepos grandson, nephew; akin to OE nefa grandson, nephew,
Skt napāt grandson] (14c) 1: a son of one's brother or sister or of
one's brother-in-law or sister-in-law b: an illegitimate son of an ec-

clesiastic 2 obs.: a lineal descendant; esp.: GRANDSON
nepho-scope \nə-ˈfə-skōp/ n [Gk nephos cloud + ISV -scope — more
at NEBULA] (1881): an instrument for observing the direction and
velocity of clouds

neph- or nephro- comb form [NL, fr. Gk, fr. nephros — more at NE-
PHRITIS]: kidney (nephric) (nephrology)

ne-phrec-to-my \ni-ˈfrek-tə-mē/ n, pl -mies [ISV] (1880): the surgical
removal of a kidney — ne-phrec-to-mize \-mīz/ v

neph-ric \nə-ˈfrik/adj (1887): RENAL
ne-phrid-i-um \ni-ˈfri-dē-əm/ n, pl -la \-dē-ə/ [NL] (1877): a tubular
glandular excretory organ characteristic of various invertebrates — ne-

phrid-i-al \-dē-əl/adj
neph-rite \nə-ˈfrit/ n [G Nephrit, fr. Gk nephros; fr. its formerly being
worn as a remedy for kidney diseases] (1794): a compact tremolite or
actinolite that is the commoner and less valuable kind of jade and that
varies in color from white to dark green or black

ne-phrit-ic \ni-ˈfri-tik/adj (1580) 1: RENAL 2: of, relating to, or
affected with nephritis

ne-phrit-itis \ni-ˈfri-tīs/ n, pl ne-phrit-itis \-frit-ē-dēz/ [LL, fr. Gk,
fr. nephros kidney; prob. akin to ME nere kidney] (1580): acute or
chronic inflammation of the kidney caused by infection, degenerative
process, or vascular disease

ne-phrol-o-gy \ni-ˈfrā-lō-jē/ n (ca. 1842): a branch of medicine con-
cerned with the kidneys — ne-phrol-o-gist \-jīst/ n

neph-ron \nə-ˈfrān/ n [G, fr. Gk nephros] (1932): a single excretory
unit of the vertebrate kidney

ne-phro-pa-thy \ni-ˈfrā-pə-thē/ n, pl -thies [ISV] (ca. 1900): an ab-
normal state of the kidney; esp.: one associated with or secondary to
some other pathological process — ne-phro-pa-thic \nə-ˈfrā-pə-thīk/
adj

ne-phro-sis \ni-ˈfrō-sīs/ n [NL] (1916): a noninflammatory disease of
the kidneys chiefly affecting function of the nephrons; also: NEPHROTIC
SYNDROME — ne-phrot-ic \-frā-tīk/adj or n

neph-ro-stome \nə-ˈfrō-stōm/ n [NL nephrostoma, fr. neph- + stoma
stoma] (1888): the ciliated funnel-shaped coelomic opening of a typi-
cal nephridium

nephrotic syndrome n (1939): an abnormal condition that is marked
by deficiency of albumin in the blood and its excretion in the urine due
to altered permeability of the glomerular basement membranes

neph-ro-tox-ic \nə-ˈfrō-tāk-sīk/adj (1902): poisonous to the kidney
(~ drugs); also: resulting from or marked by poisoning of the kidney
(~ effects) — neph-ro-tox-ic-ity \-tāk-sī-sə-tē/ n

ne plus ul-tra \nə-ˈplaz-ūl-trə/ n, nē- n [NL, (go) no more beyond]
(1638) 1: the highest point capable of being attained: ACME 2: the
most profound degree of a quality or state

nep-o-tism \nə-ˈpō-tiz-əm/ n [F népotisme, fr. It nepotismo, fr. nepote
nephew, fr. L nepot-, nepos grandson, nephew — more at NEPHEW]
(1670): favoritism (as in appointment to a job) based on kinship —

nep-o-tis-tic \nə-ˈpō-tis-tīk/adj
Nep-tune \nəp-ˈti:n-, ˈtyūn/ n [L Neptunus] 1: a: the Roman god of
the sea — compare POSEIDON b: OCEAN 2: the planet 8th in order
from the sun — see PLANET table — Nep-tu-ni-an \nəp-ˈti:n-ē-an,
ˈtyū-adj

nep-tu-ni-um \nəp-ˈti:n-ē-əm, ˈtyū- n [NL, fr. ISV Neptune] (1941):
a radioactive metallic element that is chemically similar to uranium
and is obtained in nuclear reactors as a by-product in the production of
plutonium — see ELEMENT table

nerd \nɜrd/ n [perh. fr. nerd, a creature in the children's book *If I Ran
the Zoo* (1950) by Dr. Seuss (Theodor Geisel)] (1951): an unstylish,
unattractive, or socially inept person; esp.: one slavishly devoted to
intellectual or academic pursuits (computer ~s) — nerd-ish \nɜrd-
ish/adj — nerdy \nɜrdi/adj

ne-re-id \nir-ē-əd/ n [NL Nereidae, fr. Nereis, a genus, fr. L, Nereid]
(1840): any of a family (Nereidae) of polychaete worms; esp.: any of
a genus (Nereis) of usu. large often dimorphic and greenish mostly ma-
rine worms — nereid adj

Ne-re-id \nir-ē-əd/ n [L Nereid-, fr. Gk Nēreid-, Nereis, fr.
Nēreus Nereus] (1680): any of the sea nymphs fathered by Nereus

Ne-re-us \nir-ē-əs/ n [L, fr. Gk Nēreus]: a sea-god in Greek mythol-
ogy

ne-rit-ic \nə-ˈrit-ik/adj [ISV, perh. fr. NL Nerita, genus of marine
snails] (1891): of, relating to, inhabiting, or constituting the belt or
region of shallow water adjoining the seacoast

ner-ol \nə-ˈrōl, ˈnir- n [ISV ner- (fr. neroli oil) + -ol] (1869): a liquid
alcohol C₁₀H₁₆O that has a rose scent and is used in perfumery

ner-ol-i-oil \nə-ˈrō-lē-ō/ n [F neroli, fr. It neroli, fr. Anna Maria de La
Trémouille, princess of Nerola fl. 1670] (1849): a fragrant pale yellow
essential oil obtained from orange flowers and used esp. in cologne and
as a flavoring

ner-ty \nɜrt/ n pl [alter. of nuts] (ca. 1932) slang: NONSENSE, NUTS —
often used interjectionally

ner-va-tion \nər-ˈvā-shən/ n (1849): an arrangement or system of
nerves; also: VENATION

nerve \nɜrv/ n [L nervus sinew, nerve; akin to Gk neuron sinew, nerve,
nēn to spin — more at NEEDLE] (14c) 1: SINEW, TENDON (strain every
~) 2: any of the filamentous bands of nervous tissue that connect
parts of the nervous system with the other organs, conduct nervous
impulses, and are made up of axons and dendrites together with protec-

tive and supportive structures 3: a: power of endurance or control:
FORTITUDE, STRENGTH b: ASSURANCE, BOLDNESS; also: presump-
tuous audacity: GALL 4: a: a sore or sensitive point b pl: nervous
disorganization or collapse: NERVOUSNESS 5: VEIN 6: the sensitive
pulp of a tooth syn see TEMERITY

nerve vi nerved; nerv-ing (ca. 1749): to give strength or courage to
: supply with physical or moral force

nerve cell n (1858): NEURON; also: CELL BODY
nerve center n (1868) 1: CENTER 2c: 2: a source of leadership, orga-
nization, control, or energy (the financial nerve center of the nation)

nerve cord n (1877) 1: the pair of closely united ventral longitudinal
nerves with their segmental ganglia that is characteristic of many elon-
gate invertebrates (as earthworms) 2: the dorsal tubular cord of
nervous tissue above the notochord of a chordate that comprises or
develops into the central nervous system

nerved \nɜrvd/adj (1800) 1: a: VEINED (a ~ wing) b: having
veins or nerves esp. of a specified kind or number — used in combina-
tion (fan-nerved leaves) 2: showing courage or strength

nerve ending n (ca. 1890): a structure forming the distal end of a
nerve axon

nerve fiber n (ca. 1847): any of the processes (as axons or dendrites)
of a neuron

nerve gas n (1940): an organophosphate chemical weapon that inter-
feres with normal nerve transmission and induces intense bronchial
spasm with resulting inhibition of respiration

nerve growth factor n (1962): a protein that promotes development
of the sensory and sympathetic nervous systems and is required for
maintenance of sympathetic neurons

nerve impulse n (1900): the progressive physicochemical change in
the membrane of a nerve fiber that follows stimulation and serves to
transmit a record of sensation from a receptor or an instruction to act
to an effector — called also nervous impulse

nerve-less \nɜrv-ləs/adj (1742) 1: lacking strength or courage
: FEEBLE 2: exhibiting control or balance: POISED, COOL — nerve-
less-ly adv — nerve-less-ness n

nerve net n (1904): a network of nerve cells apparently continuous
with one another and conducting impulses in all directions; also: a
primitive nervous system (as in a jellyfish) consisting of such a network

nerve-rack-ing or nerve-wrack-ing \nɜrv-ˈræk-ŋg/adj (1812): ex-
tremely trying on the nerves (a ~ ordeal)

nerve trunk n (1851): a bundle of nerve fibers enclosed in a connec-
tive tissue sheath

ner-vos-i-ty \nɜrv-ˈvə-sə-tē/ n (1787): the quality or state of being
nervous

ner-vous \nɜrv-əs/adj (14c) 1: archaic: SINEWY, STRONG 2: marked
by strength of thought, feeling, or style: SPIRITED (a vibrant tight-
packed ~ style of writing) 3: of, relating to, or composed of neurons

4: a: of or relating to the nerves; also: originating in or affected by
the nerves (~ energy) b: easily excited or irritated: JUMPY c:
TIMID, APPREHENSIVE (a ~ smile) 5: a: tending to produce nervous-
ness or agitation: UNEASY (a ~ situation) b: appearing or acting
unsteady, erratic, or irregular — used of inanimate things syn see
VIGOROUS — ner-vous-ly adv — ner-vous-ness n

nervous breakdown n (1905): an attack of mental or emotional dis-
order esp. when of sufficient severity to require hospitalization

nervous Nell-ie or nervous Nel-ly \nɜrv-ˈnɛ-lē/ n, pl nervous Nellies
often cap 1st N [fr. the name Nellie] (1926): a timid or worrisome per-
son

nervous system n (1740): the bodily system that in vertebrates is
made up of the brain and spinal cord, nerves, ganglia, and parts of the
receptor organs and that receives and interprets stimuli and transmits
impulses to the effector organs — compare CENTRAL NERVOUS SYSTEM;
AUTONOMIC NERVOUS SYSTEM, PERIPHERAL NERVOUS SYSTEM

ner-vure \nɜrv-ˈvyər/ n [F, fr. nerf sinew, fr. L nervus] (1816): VEIN 3

nervy \nɜrv-ˈvē/adj nerv-i-er; -est (1607) 1: archaic: SINEWY, STRONG
2: a: showing calm courage: BOLD b: marked by effrontery or pre-
sumption: BRASH 3: EXCITABLE, NERVOUS — nerv-i-ly \-və-lē/adv —
nerv-i-ness \-və-nəs/ n

ne-science \nə-ˈsh(ē)-ənt(s), ˈnē-, ˈsē-ənt(s)/ n [LL nescientia, fr. L
nescire-, nesciens, prp. of nescire not to know, fr. ne- not + scire
to know — more at NO SCIENCE] (1612): lack of knowledge or awareness:
IGNORANCE — ne-scient \-sh(ē)-ənt, ˈsē-ənt/adj

ness \nɛs/ n [ME nasse, fr. OE nass; akin to OE nasu nose — more at
NOSE] (bef. 12c): CAPE, PROMONTORY

-ness \nəs/ n suffix [ME -ness, fr. OE; akin to OHG -nissa -ness]: state
: condition: quality: degree (goodness)

Nes-sel-rode \nə-səl-rōd/ n [Count Karl R. Nesselrode †1862 Russ.
statesman] (1845): a mixture of candied fruits, nuts, and maraschino
used in puddings, pies, and ice cream

Nes-sus \nə-ˈsəs/ n [L, fr. Gk Nessos]: a centaur slain by Hercules for
trying to carry away Hercules' wife but avenged by means of a poi-
soned garment that causes Hercules to die in torment

nest \nɛst/ n [ME, fr. OE; akin to OHG nest nest, L nidus] (bef. 12c)
1: a: a bed or receptacle prepared by an animal and esp. a bird for its
eggs and young b: a place or specially modified structure serving as
an abode of animals and esp. of their immature stages (an ants' ~) c:
a receptacle resembling a bird's nest 2: a: a place of rest, retreat,
or lodging: HOME (grown children who have left the ~) b: DEN.

about \ə/ kitten, F table \t/ further \ə/ ash \ə/ ace \ə/ mop, mar
\ə/ out \ə/ chin \t/ bet \t/ easy \t/ go \t/ hit \t/ ice \t/ job
\t/ sing \t/ go \t/ law \t/ boy \t/ thin \t/ the \t/ loot \t/ foot
\t/ yet \t/ vision \ə, k, ʃ, œ, æ, ɛ, ɛ, ʌ see Guide to Pronunciation

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